What's New in Economics?

April/May, 2004 **Volume 1, Number 2**

"Good environmentalism is good economics."
-Barber Conable, President of The World Bank

New Buffer Analysis Tool

In the last "What's New in Economics?" I discussed the Economics of Buffers spreadsheet that was originally developed by the National Conservation Buffer Council and updated for Minnesota. Now there is a new tool to assist landowners and planners in analyzing the costs and benefits of conservation buffers. The USDA National Agroforestry Center (NAC) developed Buffer$, a simple spreadsheet-based application. I have used Buffer$ and find it easy to use and effective. Buffer$ can calculate potential income from a buffer:

- ☐ Using cost share programs;
- ☐ Growing agroforestry specialty products; and
- ☐ Incorporating other income opportunities.

For decision making purposes, Buffer$ can compare the potential income generated between installing a buffer on a portion of land or cropping that portion of land. Buffer$ can also be used to evaluate the economic impact of removing an existing buffer.

Buffer$ can be downloaded at http://www.unl.edu/nac/conservation and requires Microsoft Excel to run. The costs for installation and maintenance budgets and the county soil rental rates for calculating CCRP payments are currently Nebraska rates but Minnesota rates can easily be entered into Buffer$. If you are interested in using this tool, contact me and we can update the data for your county or area.

Great Lakes Grazing Network

The *Regional Multi-State Interpretation of Small Farm Financial Data*, the second year report of a USDA Integrated Food and Agricultural Systems (IFAS) Grant project on 2001 Great Lakes Grazing Network grazing dairy data, combines actual farm data from 126 graziers from across the Great Lakes region to provide financial benchmarks. To be considered a grazier for the study, a producer must harvest over 30% of grazing season forage needs by grazing and provide fresh pasture at least once every three days.

The report highlights four main points regarding the economics of grazing as a dairy system.

1. The profitability among graziers ranges from the most profitable top half with a Net Farm Income From Operations per Hundred Weight Equivalent (NFIFO/CWT EQ) of $4.76 to the lower profitable bottom half with a NFIFO/CWT EQ) of $1.95. Paid labor and management compensation have been omitted so if they were included the NFIFO/CWT EQ would increase.

2. The average dairy with less than 100 cows had a higher NFIFO per cow and per CWT EQ than the average dairy with more than 100 cows. A larger herd usually means higher labor costs.
3. The average grazier using seasonal calving strategy, where they stop milking at least one day each year, saw a more positive financial performance than the average non-seasonal grazier. However this is different than the data collected in 2001. The report indicates that the 2001 data likely represents what can be achieved with good conditions and with managers that are experienced and highly capable.
4. This study shows that the graziers were economically competitive with the confined dairies in the states with similar data.

The above information was taken from the following website: http://cdp.wisc.edu/Great%20Lakes.htm.

Researchers with the Extension Service at the West Central Research and Outreach Center have also been working on a project looking at the financial performance of rotationally grazed dairies in Minnesota. Initial comparisons of results show that milk production may be slightly lower for pastured dairy cows but is offset by lower input costs. There may also be a lower start-up cost. To learn more about this project, check out the following link: http://www.extension.umn.edu/mnimpacts/impact.asp?projectID=2802.

Useful Websites

There are a number of useful economics websites offering information regarding agriculture and conservation. In each newsletter, I will highlight one or two of my favorites.

- http://cdp.wisc.edu/Welcome.htm - This is the website for the Center for Dairy Profitability at the University of Wisconsin – Madison.
- http://res2.agr.ca/initiatives/manurenet/manurenet_en.html - ManureNet is a Canadian website dedicated to manure management, not only in Canada but also in the US.

Based on the 2002 Census of Agriculture preliminary demographic data:

1. ***The average age of American agricultural producers in 2002 was 55.3 years old.***
2. ***27.2% of agricultural producers were women in 2002; the number of women who were principal operators increased 12.6% from 1997.***
3. ***Black principal operators increased by 8.8% from 1997 to 2002.***

There are many other facts and reports at http://www.usda.gov/nass/

Leah Moore
ECS
USDA-NRCS
375 Jackson Street
Suite 600
St. Paul, MN 55101

Phone:
651.602.7867

Fax:
651.602.7914

E-mail:
leah.moore@mn.usda.gov

We're on the Web!
www.mn.nrcs.usda.gov

The Economics Of Carbon Sequestration

Research shows that global temperatures have risen over the last 50 years, due much in part to increased atmospheric concentrations of carbon dioxide and other "greenhouse" gases. In *"Is Carbon Sequestration in Agriculture Economically Feasible?"*, a recent article published by the Economic Research Service (ERS), researchers found that activities that promote carbon sequestration are technically feasible but may not always be economically feasible. In addition, an activity adopted to promote carbon sequestration may be economically feasible for some producers in one area of the country but may not be economically feasible for producers in a different area. There is a wide variation in the costs of implementing carbon-sequestering land uses and practices. The following alternatives for promoting carbon sequestration through increasing carbon levels in soils and vegetation were analyzed in the research:

- ☐ Convert croplands and pasture to trees;
- ☐ Shift cropland to permanent grasses; and/or
- ☐ Increase the use of conservation tillage systems.

Using incentive payment structures, the ERS researchers found that with incentive payments below $10 per metric ton of additional permanently stored carbon, operators find it more economically efficient to implement conservation tillage practices instead of changing land uses and management practices. For higher levels of incentive payments, there was an increase in the economic feasibility of converting cropland to trees. Regardless of the level of incentive payments, converting cropland to grass was not a cost-effective option.

This article is based on *Is Carbon Sequestration in Agriculture Economically Feasible?*, published in *Amber Waves* for April 2004 on page 9. You can access *Amber Waves* at http://www.ers.usda.gov/amberwaves.

Rising Fuel Prices – Hard on Farmers

Spring planting brings many concerns for producers, but this year they have a new issue to tackle, rising fuel prices. The Associated Press reported that farmers are paying 30 cents or more per gallon over last year for diesel fuel. The increase in the cost of diesel fuel may impact a number of production choices made by the producer, such as the type of tillage to use (i.e., no-till or minimal tillage instead of conventional tillage). Producers may even change the mixture of crops to plant. However, as by an extension agent in Arkansas in the Associated Press article, the biggest impact of higher fuel prices may be even harder to swallow once farmers start running their diesel irrigation pumps later in the growing season. This information came from *"Fuel Prices Hitting Farmers Hard",* from the Associated Press on March 30, 2004.